

## **Dr Caroline Watt: The Science of the Paranormal Transcript**

**Jackie:**

Hello and welcome to *Forward Thinking*, a monthly podcast from the School of Philosophy, Psychology and Language Sciences, where once a month we talk to our academics about their cool research ideas and projects. My name's Jackie Thompson and today I'm talking to Dr Caroline Watt.

Caroline's a senior lecturer in psychology here at Edinburgh, and she's also a founder member of the Koestler Parapsychology Unit also based at the Uni. We're going to be talking about how the subject of parapsychology currently sits within academic research, and Caroline's own research interests. We start the discussion off with the Koestler Unit itself, which is totally unique in that it hosts the only endowed chair of Parapsychology in the UK. It's also celebrating its 30<sup>th</sup> Anniversary this year.

I wonder if you could tell us about the unit Caroline, and what makes it a valuable part of the psychology department?

**Caroline:**

Well, we had an unusual start. It all began with Arthur Koestler and his wife Cynthia Koestler, who sadly killed themselves in a suicide pact in 1983. But they left their entire estate to support the establishment of a parapsychology unit at a British University, and Koestler, although he was well known as an intellectual and a writer on political matters, also had a lifelong interest in the paranormal and in dualism; in mind-body issues, and Edinburgh University already had a researcher called John Beloff in the Psychology Department, who was a friend of Koestler, who was a dualist, and who was interested in parapsychology. So Edinburgh, because it was familiar with John Beloff's work, were happy to welcome the Koestler Chair into the department. In terms of the value of the subject, surveys show that about 50% of the public have some kind of paranormal belief, and about half of these think they've had some kind of paranormal experience. So although these maybe unusual experiences and beliefs they are not at all rare. So to me and most parapsychologists, it's obviously an interesting question- what lies behind these experiences, what are the consequences and the causes of these beliefs.

**Jackie:**

And how did you get involved yourself?

**Caroline:**

Well unlike some parapsychologists, I've never had any experiences that I personally think are paranormal. So I wasn't driven from that angle. I graduated from St Andrew's University with a psychology degree just at the time the Koestler professorship was being announced and there was a lot of press interest. And as a psychologist I was aware that people were having these experiences and I was just curious. So I wrote to the incoming professor Doug Morris and I said if you need an assistant let me know.

**Jackie:**

Interestingly enough the Koestler Parapsychology Unit is celebrating its 30<sup>th</sup> anniversary this year – has the approach changed over time? Has science or technology changed the way you study?

**Caroline:**

I don't think there are any parapsychology specific changes, but there are changes, things like the – now it's called the Research Excellence Framework- that have changed the way that researchers practice their research. There's more effort to publish in high impact journals than there used to be, so there's more pressure to do that and I think that atmosphere can sometimes make researchers a little bit more conservative. Having said that parapsychology obviously is an unusual area of research and there's plenty of unanswered questions and there's lots of experimentation to be done.

**Jackie:**

Can you give us a couple of interesting results of experiments that have come out over the 30 years? – that's like picking a grain of sand out of a beach, but is there anything that stands out in your mind?

**Caroline:**

Well in fact this last year, because it was our anniversary year, I've been looking at the archives and I've actually created an online archive of publications that have come out of the unit. But one of the areas that we've done quite a few studies in is Ganzfeld ESP research- so this is work that uses a mild sensory isolation procedure and the idea of the experiment is that the sender tries to communicate mentally the content of the target to the receiver who is in the Ganzfeld environment, and they describe out loud any thoughts, feelings, impressions that come into their mind. At the end of the session there's a judging period where we judge the receiver's impressions against 4 possible targets and we can work out from that the chance expectation is 25%. So what we've been doing in these experiments (and this is a body of research that goes beyond Edinburgh and is conducted all around the world) is comparing the obtained success rate with the chance success rate. In Edinburgh, our success rate is about 29-30% which might not sound like much, but it is a statistically significant effect, and it is the same magnitude of effect that researchers have found around the world. So it's too early to say that's evidence for ESP, but it's carefully conducted research, and it certainly deserves to be taken seriously. When we look at the whole data base beyond Edinburgh I think one of the issues is whether or not we're seeing all of the studies and what happens with the studies that have not been published, and I did a quick search and found only about 13 studies (unpublished studies) and they had a hit rate that was much closer to chance. So what that means is that there's a problem with publication bias in this literature, so the published studies are not telling us the whole picture. To deal with that problem in 2012 I set up a study registry, and again this can be seen on our website. This allows researchers to deposit the plans for a study publicly, before the work is actually conducted, and that will deal with the issue of publication bias because whatever the study found, people will know that the study has been conducted.

**Jackie:**

You seem to be broadening the interest to outside academia in a way so you've got the website, and people can go and look at studies, and I know that people are really interested in this subject, even if they don't believe in it. You recently have brought some of the work of the unit to the public in an Edinburgh Fringe Show which was called 'Unbelievable, the Science of the Paranormal'- what did you actually bring to the public and how did it go down?

**Caroline:**

Well, this was a collaboration with Professor Richard Wiseman, and we wanted to do something to celebrate the anniversary of the unit and to make a bit more of a noise about parapsychology because it's a subject with baggage, and people have a lot of misconceptions – helped by things like

Ghostbusters the movie, and it was an interactive talk, people come in, and it's a relatively small group of 40 people, and they're all given a packet of materials to work with and I take them through, partly with demonstrations, to show the psychology behind psychic experiences – so what psychological factors might make you think you'd had a paranormal experience, and also then show people how parapsychologists conduct control tests in the laboratory, and I lead people through a couple of tests. They get to do things like practice being a fake psychic by moving a pen through the power of their mind. So it's a lot of fun but it's a serious underlying message and that is that we've got to be very careful how we conduct this research, and when we're doing this at the Koestler Unit we're doing carefully controlled scientific research.

**Jackie:**

Did you find people were interested in it even if they didn't believe in it?

**Caroline:**

Yes there was a huge public hunger for this – I'm quite passionate and really enjoyed putting this on, and like many subjects parapsychology is a subject about which everyone has an opinion, and a lot of people have had personal experiences. If they haven't personally had an experience they probably know someone who has a family member or a friend, so it's an area where there's a huge potential for public communication and public engagement, not only to help people think critically about their experiences but also to communicate how to do research and what normal factors need to be controlled for if you want to actually assess for whether or not there really is anything paranormal going on.

**Jackie:**

So Caroline can you tell us about the sort of research that you do personally?

**Caroline:**

Well the last few years I was very fortunate to win the Perrott-Warrick Research Fellowship, so I had a dedicated programme of research support for that, which was looking at precognitive dreaming-dreams that have predicted the future. The work looked at both sides of the story, so some of the studies that we did looked at the psychology behind these experiences, so for example we looked at memory bias, and we found that people are much more likely to remember dreams that seem to come true than the dreams that don't come true, and we have so many dreams, that just by chance every now and then everyday events will resemble a dream. And we've also looked at what happens when you do a controlled test in the lab, where you see whether someone can dream about a randomly selected future event, when we did that (so that's testing the paranormal) hypothesis, we were not able to find anything in support of dream precognition. So what our research programme seemed to say was that we certainly found various psychological factors that would inflate the likelihood of you thinking that you'd had a precognitive experience, but when we removed these factors and put someone into the lab we didn't find evidence. Which suggests that in the real world many people's precognitive dream experiences maybe due to these psychological factors operating.

**Jackie:**

On a similar note to that, whether we believe in the paranormal or not, our attitudes to it tell us a lot about human nature. What have you seen that's really interesting about human nature in relation to the paranormal?

**Caroline:**

Well it's clear that some people have a need to believe in the paranormal and we have done some research into this, following on (it's not just us but building on other people's research) and for some individuals there seems to be a connection between a need for control over the environment. So for example superstitious beliefs are more prevalent in cultures where people are living some sort of risk or dangerous environment, and the superstitious belief for example of making an offering to a god or going through various rituals doesn't actually change the likelihood of the volcano exploding, but it makes you feel better. So in many cases paranormal beliefs give a feeling of control and a sense of comfort. It's illusory, but that I think is the psychological function served by these beliefs. We've done some research ourselves into this looking at childhood experiences and what we found was that if you've had a childhood that's characterised by a lack of control, so for example parents divorcing, having to move house many times, or living in a very large household where it's difficult to get noticed, then you're more likely to develop paranormal beliefs, so we think (and this isn't the case for everybody) that for some people, believing that you can predict the future, believing that you can read people's minds, gives a sense of control over an otherwise uncontrolled environment.

**Jackie:**

Given what you've just said, do you think that people believe in psychic abilities and in the paranormal more than they actually admit to? So they might say 'no I don't believe....what rubbish!' but then won't walk under a ladder...

**Caroline:**

Yes there is some research on that in that if you just ask people 'are you superstitious' they're likely to say 'oh no not at all', but if you put them in a situation where they break a mirror, or ask them to walk under a ladder and you'll find that they'll avoid doing it. So there's a difference between how people act and what they say when they're asked and that's probably because in our particular culture, it's not generally seen as a good thing to believe in the paranormal – there's a little bit of a taboo associated with it. It's not quite the case for religious beliefs although even that is changing.

Religious beliefs are a form of paranormal belief, you know, pray for something and it will happen or in believing in miracles, religious miracles, divine beings, these are all paranormal beliefs. But I think that atheism is getting a louder voice now and I think there's more popular questioning over religious beliefs now than there used to be.

**Jackie:**

So, last question- I'm just wondering about your plans for the future

**Caroline:**

So this year I've been taking stock of what's been achieved at the Koestler Unit and good lines of work to pursue in the future and there's two directions. In terms of research, there's one particular group of studies called remote helping studies, where one person attempted to remotely help somebody else do a meditation task and the results have been quite intriguing, so I think that will be an area for future direction. And the other thing is doing the 'Unbelievable – Science of the Paranormal' workshop has been a really interesting experience. Every performance that I've done of it has been fully booked, so there's obviously a huge public appetite and the Koestler Unit is such a unique research unit; there is nothing like it in the country, so we're in a really strong position, we're university-based, we have an authoritative voice, so I would like to develop that somehow, I'm not quite sure how yet, I'd like to develop that so that we have more members of the public having

personal experiences, with our help, showing them the psychology behind the paranormal and also what parapsychologists actually do.

**Jackie:**

It's been so interesting to talk to you today Caroline and I wish you good luck for the future

**Caroline:**

Thank you very much

**Jackie:**

So a big thank you to Dr Caroline Watt for talking us today on such a cool topic, If you want to find out more about the Koestler Parapsychology Unit and Caroline's work, you'll find the relevant links at the Forward Thinking Blog. And if you want to hear more podcasts like this one, you can subscribe either to the blog, or on iTunes.